

## Active Surveillance for Hemolytic Uremic Syndrome at Selected Sites, United States, 1997

Mead P, Bender J, Dembek Z, Gilbert L, Shallow S, Shiferaw B, Griffin P

**Background:** Diarrhea-associated hemolytic uremic syndrome (D+HUS) is a life-threatening illness characterized by hemolytic anemia, thrombocytopenia, and acute renal failure. In developed countries, nearly all cases of D+HUS are caused by infection with Shiga toxin-producing *Escherichia coli* (STEC). Many STEC serotypes have been reported to cause D+HUS.

**Methods:** To determine the incidence of clinically-defined D+HUS and identify STEC serotypes that cause D+HUS in the United States, pediatric nephrologists in five catchment areas (total population=13.2 million) were contacted monthly, beginning February 1, 1997, and asked to report HUS cases diagnosed in the preceding month.

**Results:** During the first 10 months of surveillance, 23 cases of D+HUS were reported. Eighteen cases occurred in residents of the catchment area, yielding a crude annual incidence of 1.6 reported cases per million population. Patients were a median of 3 years old (range, 1-51 years); 53% were female. Median laboratory values at the time of HUS diagnosis included creatinine 2.7 mg/dl (range, 0.5-14.4), hematocrit 18.0 % (range, 6.3-33.0), and platelet count 38 thousand/cmm (range, 3-152). Patients were hospitalized for a median of 12 days (range, 3-33), and 7 (37%) required dialysis. Seizures developed in 2 (10%) patients, one of whom had persistent neurologic deficits at the time of hospital discharge. *Escherichia coli* O157:H7 was isolated from 9 (90%) of 10 stool specimens obtained within 10 days of diarrhea onset from patients who had not received antibiotics.

**Conclusions:** Preliminary results suggest that in the United States most cases of D+HUS are caused by infection with *E. coli* O157:H7. Active surveillance networks based on data from specialty health care providers can provide timely and detailed surveillance data and may be valuable for monitoring other serious sequelae of foodborne disease.

### Suggested citation:

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